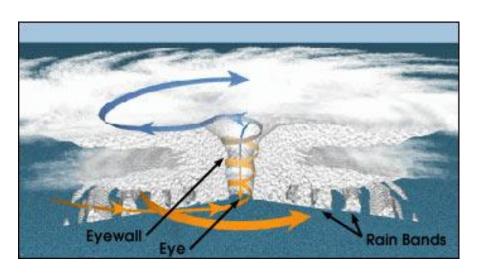
## Hurricanes

#### What is a hurricane?

A hurricane is a huge storm! It can be up to 600 miles across and have strong winds spiraling inward and upward at speeds of 75 to 200 mph. Each hurricane usually lasts for over a week, moving 10-20 miles per hour over the open ocean. Hurricanes gather heat and energy through contact with warm ocean waters. Evaporation from the seawater increases their power. Hurricanes rotate in a counter-clockwise direction around an "eye" in the Northern Hemisphere and clockwise direction in the Southern Hemisphere. The center of the storm or "eye" is the calmest part. It has only light winds and fair weather. When they come onto land, the heavy rain, strong winds and large waves can damage buildings, trees and cars.

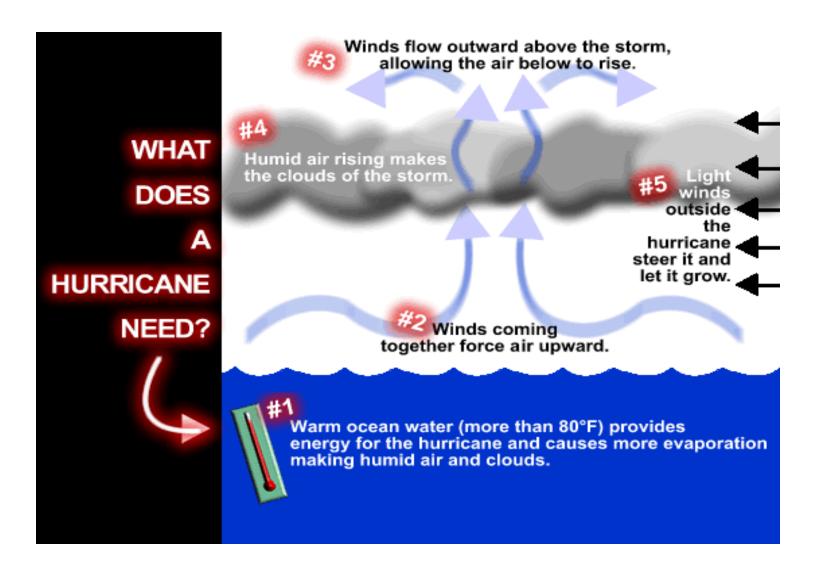


### When does hurricane season start?

The Atlantic hurricane season is from June 1 to November 30, but most hurricanes occur during the fall months. The Eastern Pacific hurricane season is from May 15 to November 30. (Below is a graphic that shows you when hurricanes are most active across parts of the world.)



2 16.5 35



### Who names hurricanes?

From 1950 to 1952, tropical cyclones of the North Atlantic Ocean were identified by the phonetic alphabet (Able-Baker-Charlie-etc.), but in 1953 the US Weather Bureau switched to women's names. The rest of the world eventually caught on, and naming rights now go by the World Meteorological Organization, which uses different sets of names depending on the part of the world the storm is in. Around the U.S., only women's names were used until 1979, when it was decided that they should alternate a list that included men's names too. There's 6 different name lists that alternate each year. If a hurricane does significant damage, its name is retired and replaced with another.



TROPICAL STORM WATCH - Tropical Storm conditions with sustained winds from 39 -74 mph are possible in your area within the next 36 hours.

TROPICAL STORM WARNING - Tropical Storm conditions are expected in your area within the next 24 hours.

HURRICANE WATCH - Hurricane conditions with sustained winds of 74 mph or greater are possible in your area within the next 36 hours. This WATCH should trigger your family's disaster plan, and protective measures should be initiated. Especially, those actions that require extra time such as securing a boat and leaving a barrier island.

**HURRICANE WARNING** - Hurricane conditions are expected in your area within 24 hours. Once this WARNING has been issued, your family should be in the process of completing protective actions and deciding the safest location to be during the storm.

COASTAL FLOOD WATCH - The possibility exists for the inundation of land areas along the coast within the next 12 to 36 hours.

COASTAL FLOOD WARNING - Land areas along the coast are expected to become, or have become, inundated by sea water above the typical tide action.

**SMALL CRAFT ADVISORY** - A small craft advisory is a type of warning issued by the National Weather Service, most frequently in coastal areas. It is issued when winds have reached, or are expected to reach within 12 hours, a speed marginally less than that which is considered gale force, usually 25-38 mph.



# Hurricane Stages



| Tropical Wave           | A low pressure trough moving generally westward with the trade winds.  |  |  |
|-------------------------|--|--|--|
| Tropical<br>Disturbance | An organized area of thunderstorms that usually forms in the tropics. Typically, they maintain their identity for 24 hours and are accompanied by heavy rains and gusty winds.                           |  |  |
| Tropical<br>Cyclone     | A generic term for any organized low pressure that develops over tropical and sometimes sub-tropical waters. Tropical depressions, tropical storms, and hurricanes are all example of tropical cyclones. |  |  |
| Tropical<br>Depression  | An organized area of low pressure in which sustained winds are 38 mph or less.   |  |  |
| Tropical<br>Storm       | A tropical cyclone with maximum sustained wind speeds that range from 39 to 73 mph.  |  |  |
| Hurricane               | A tropical cyclone with sustained winds of at least 74 mph.  |  |  |



## Saffir-Simpson Hurricane Scale



| <u>Category</u> | Winds (MPH) | Storm Surge<br>(Feet) | <u>Damage</u> |
|-----------------|-------------|-----------------------|---------------|
| 1               | 74-95       | 4'-5'                 | Minimal       |
| 2               | 96-110      | 6'-8'                 | Moderate      |
| 3               | 111-130     | 9'-12'                | Extensive     |
| 4               | 131-155     | 13'-18'               | Extreme       |
| 5               | >155        | >18'                  | Catastrophic  |